



UNITED STATES PATENT AND TRADEMARK OFFICE

A
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,049	12/11/2003	Mandayam T. Raghunath	Y0R920030371US1	7817
7590	10/05/2005		EXAMINER	
David Aker 23 Southern Road Hartsdale, NY 10530			PARK, IL WOO	
			ART UNIT	PAPER NUMBER
			2182	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/733,049	RAGHUNATH ET AL.
	Examiner	Art Unit
	Ilwoo Park	2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11 December 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-9, 11-22, 24-35 and 37-39 is/are rejected.
- 7) Claim(s) 10, 23 and 36 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-39 are presented for examination.

Claim Objections

2. Claim 29 is objected to because of the following informalities: claim dependency is not correct. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-7, 11-20, 24-33, and 37-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Bunnell, US patent No. 5,564,015.

As to claims 1, 14, and 27, Bunnell teaches in a computer system having a processor with a plurality of activity states [col. 4, lines 9-15], and at least one peripheral device in operative relation with the processor, a method of operating the computer system comprising communicating [col. 6, lines 44-51] the activity state of the processor to the at least one peripheral device.

5. As to claims 2, 15, and 28, Bunnell teaches supplying an interrupt from the peripheral to the processor when the processor changes activity states from a first activity state to a second activity state [col. 10, lines 10-14].
6. As to claims 3, 16, and 29, Bunnell teaches detection of the activity state of the processor by the peripheral before said interrupt is supplied [col. 9, lines 31-40].
7. As to claims 4, 17, and 30, Bunnell teaches said supplying of said interrupt is performed only if said peripheral needs to be serviced by said processor [col. 14, lines 24-35].
8. As to claims 5, 18, and 31, Bunnell teaches the peripheral has a plurality of urgency states and an activity state of the processor is evaluated against the urgency state of the peripheral to determine whether said peripheral issues an interrupt [col. 10, lines 60-67].
9. As to claims 6, 19, and 32, Bunnell teaches if said urgency state of said peripheral is high, said peripheral issues an interrupt to said processor regardless of said activity state of said processor [col. 14, lines 24-35].
10. As to claims 7, 20, and 33, Bunnell teaches if said urgency state of said peripheral is low, said peripheral issues an interrupt to said processor only if said activity state of said processor is other than low [col. 10, lines 60-67].
11. As to claims 11, 24, and 37, Bunnell teaches the activity states of the processor are represented by at least one bit output of the processor [e.g., col. 7, lines 14-60; fig. 2].

12. As to claims 12, 25, and 38, Bunnell teaches the activity states of the processor are represented by at least one output word generated by the processor [e.g., col. 7, lines 14-60; fig. 2].

As to claims 13, 26, and 39, Bunnell teaches the activity state of the processor is communicated as being in a state selected from active, idle and sleep [col. 10, lines 15-28; col. 11, lines 37-47].

13. Claims 1, 2, 8, 9, 11-15, 21, 22, 24-28, 34, 35, and 37-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Kaushik et al., US patent application publication No. 2004/0128563 A1.

As to claims 1, 14, and 27, Kaushik et al teach in a computer system having a processor with a plurality of activity states [fig. 4], and at least one peripheral device in operative relation with the processor, a method of operating the computer system comprising communicating [paragraph 0027] the activity state of the processor to the at least one peripheral device.

14. As to claims 2, 15, and 28, Kaushik et al teach supplying an interrupt from the peripheral to the processor when the processor changes activity states from a first activity state to a second activity state [updating the task priority and power state information whenever the processor state changes and sending interrupt request accordingly in paragraphs 0042-0044].

15. As to claims 8 and 34, Kaushik et al teach a plurality of peripherals ['the chipset receives interrupt requests from various system devices' in paragraph 0025; fig. 1] are in operative relation with said processor, a peripheral has issued an interrupt request to

said processor, issuing interrupt requests to said processor from all of peripherals which need to be serviced, and servicing all of said interrupts requests by said processor.

As to claim 21, Kaushik et al teach a plurality of peripherals ['the chipset receives interrupt requests from various system devices' in paragraph 0025; fig. 1] are in operative relation with said processor, means for said processor to receive interrupt requests from all of said additional peripherals, when said peripherals need to be serviced, and means operatively connected with the processor for servicing all of said interrupts requests.

16. As to claims 9, 22, and 35, Kaushik et al teach said means for servicing said interrupt requests services said interrupt requests before the processor changes its activity states [paragraph 0031].

17. As to claims 11, 24, and 37, Kaushik et al teach the activity states of the processor are represented by at least one bit output of the processor [fig. 5].

18. As to claims 12, 25, and 38, Kaushik et al teach the activity states of the processor are represented by at least one output word generated by the processor [fig. 5].

19. As to claims 13, 26, and 39, Kaushik et al teach the activity state of the processor is communicated as being in a state selected from active, idle and sleep [paragraph 0031].

Allowable Subject Matter

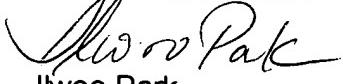
Art Unit: 2182

20. Claims 10, 23, and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ilwoo Park whose telephone number is (571) 272-4155. The examiner can normally be reached on Monday through Friday from 9:00 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (571) 272-4083. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ILWOO PARK
PRIMARY EXAMINER


Ilwoo Park

September 30, 2005